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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,960	09/30/2003	Robert Starkston	884.949US1	5313

21186 7590 03/07/2008  
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.  
P.O. BOX 2938  
MINNEAPOLIS, MN 55402

EXAMINER
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HEINRICH, SAMUEL M

ART UNIT	PAPER NUMBER
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1793

MAIL DATE	DELIVERY MODE
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03/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10674960	9/30/2003	STARKSTON ET AL.	884.949US1

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**EXAMINER**

Samuel M. Heinrich

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1793

20080225

**DATE MAILED:**

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

PTO-892 with translations of 3 Japanese references.

JP411284278A

JP355046579A

JP353002074A

/Samuel M Heinrich/  
Primary Examiner, Art Unit 1793



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/674,960  
Filing Date: September 30, 2003  
Appellant(s): STARKSTON ET AL.

**MAILED  
MAR 07 2008  
GROUP 1700**

Richard E. Billion  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 23, 2007 appealing from the Office action mailed May 05, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims which stand twice rejected contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,420,245	Manor	07-2002
6,737,606	Peng et al	05-2004

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6,586,707

Boyle et al

07-2003

JP411284278A, Inventor Hiroshi Koizumi, Assignee Toshiba Corp, Published October 15, 1999.

JP355046579A, Inventor Kenji Katagiri, Assignee Toshiba Corp, Published April 01, 1980.

JP353002074A, Inventor Yoshihiko Muraki et al, Assignee NEC Home Electronics LTD, Published January 10, 1978.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 29-31 are rejected under 35 U.S.C. 102(a & b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of JP411284278A to Toshiba Corp or USPN 6,420,245 to Manor or USPN 6,737,606 to Peng et al.

The references disclose wafer dicing with both laser and saw. The intended use of plural laser beam application and subsequent sawing does not impart patentability to the claims.

Claims 16-21, 23-27, and 32-38 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP355046579A to Toshiba Corp in view of JP353002074A to NEC Home Electronics LTD and in view of USPN 6,586,707 to Boyle et al.

Toshiba Corp describe dicing a wafer with a first laser scribe step and a second dicing saw or blade scriber cut step.

NEC shows wafer scribing comprising a first wide scribe and a second narrow scribe.

Boyle et al describe plural laser passes in the formation of a trough or slot.

The instant claimed multiple laser passes would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the final scribed work piece configuration is well known and has been performed since the 1970's and 1980's and because the current laser machining described by Boyle et al is known to precisely form slots using multiple passes.

#### **(10) Response to Argument**

Applicant argues (7A and 7B), with respect to JP411284278A, Manor, or Peng et al, that the apparatus claims are not anticipated under 35 USC 102(a & b) because the prior art do not mention a memory that includes an instruction set. This argument is not convincing. Instruction sets are program control features, and looking at USPN 6,420,245 to Manor et al, at least two of the cited references (US 5,151,389 and US 4,716,270) describe computer control.

Applicant argues (7C and 7D), with respect to JP411284278A, Manor, or Peng et al, that the apparatus claims are not obvious under 35 USC 103(a) because the prior art do not mention a memory that includes an instruction set. This argument is not convincing. Again, instruction sets are program control features, and looking at USPN 6,420,245 to Manor et al, at least two of the cited references (US 5,151,389 and US 4,716,270) describe computer control.

Applicant argues (7E), with respect to JP355046579A to Toshiba Corp in view of JP353002074A to NEC Home Electronics LTD in view of Boyle et al, that the method claims are not anticipated under 35 USC 102(a & b) because none of the references taught laser scribing a third continuous line between first and second scribed lines. This argument is not convincing. JP353002074A discloses first forming a cutout with a scribe and subsequently dicing. The instant claimed method of scribing comprising first and second laser passes and subsequently a third laser pass between the first and second passes is anticipated because forming edge scribes as two cuts and forming a second scribe to a greater depth and without contacting the first scribe walls provides a final product with less edge problems such as chipping. The instant claimed first and

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second passes in place of one initial shallow pass is a substitution of equivalents. The laser scribe in place of the saw or blade scribe is a substitution of equivalents.

Applicant argues (7F), with respect to JP355046579A to Toshiba Corp in view of JP353002074A to NEC Home Electronics LTD in view of Boyle et al, that the method claims are not obvious under 35 USC 103(a) because none of the references taught laser scribing a third continuous line between first and second scribed lines. This argument is not convincing. Applicant's arguments are against the references individually and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The instant claimed method of scribing comprising first and second laser passes and subsequently a third laser pass between the first and second passes would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the final scribed work piece configuration is well known and because the current laser machining described by Boyle et al is known to precisely form slots using multiple passes.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.



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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Samuel M Heinrich/

Primary Examiner, Art Unit 1793

Conferees:

Jonathon Johnson



Patrick J. Ryan



PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER